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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/714,171	11/14/2003	Kazunori Yoshino	03-227	2919
7590 03/13/2006		EXAMINER		
Michael B. McNeil		LOPEZ, FRANK D		
Liell & McNeil Attorneys PC		ART UNIT		
P.O. Box 2417		3745		
Bloomington, IN 47402		PAPER NUMBER		

DATE MAILED: 03/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/714,171

Applicant(s)

YOSHINO, KAZUNORI

Examiner

F. Daniel Lopez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on December 19, 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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Response to Amendment

Applicant's arguments filed December 19, 2005, have been fully considered and are persuasive. The finality of the last office action has been withdrawn.

Applicant's arguments with respect to claims 1-17 have been considered but are deemed to be moot in view of the new grounds of rejection.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 8 and 15 are rejected under the judicially created doctrine of double patenting over claims 3, 13 and 19 of U.S. Patent No. 6,945,039. Although the conflicting claims are not identical, they are not patentably distinct from each other because all the limitations of the instant application are in the claims of U.S. Patent No. 6,945,039.

Claims 2-4, 6, 7, 9, 11-14, 16 and 17 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 3, 13 and 19 of U.S. Patent No. 6,945,039 in view of Japan 2002-195,218. Claims 3, 13 and 19 of U.S. Patent No. 6,945,039 claim all the elements of claims 2-4, 6, 7, 9, 11-14, 16 and 17, a power system and method of operating the power system, including a variable

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displacement hydraulic motor operable to power a generator and connected to a hydraulic cylinder, a power storage system including at least one of a battery and a capacitor in electrical communication with the generator and an electric motor driving a pump; but does not claim that the power storage system includes a fuel cell, an electrolysis device and a hydrogen storage device; that the hydraulic motor is coupled between the first and second volumes of the cylinder (claim 5); that a step of producing hydraulic power is by retracting a plunger in the cylinder; that the power system is part of a work machine, which includes a work body, with the cylinder coupled to an implement.

Japan 2002-195,218 teaches, for a power system and method of operating the power system, including a hydraulic motor (49) operable to power a generator (50) and connected to a hydraulic cylinder (2), a power storage system including a battery (e.g. 44) in electrical communication with the generator and an electric motor (42) driving a pump (3); that the battery includes a fuel cell (46), an electrolysis device (4) and a hydrogen storage device (45); that the hydraulic motor is coupled between the first and second volumes of the cylinder; and that a step of producing hydraulic power is by retracting a plunger in the cylinder. Since a battery is defined (e.g. McGraw Hill Dictionary of Scientific and Technical Terms, 5th Ed, copyrighted 1994) as a direct current voltage source made up of one or more units that convert chemical...energy into electrical energy; the above fuel cell, electrolysis device and hydrogen storage device is a battery.

Since the batteries of U.S. Patent No. 6,945,039 and Japan 2002-195,218 are functionally equivalent in the regenerative hydraulic power art; it would have been obvious at the time the invention was made to one having ordinary skill in the art to make the battery of U.S. Patent No. 6,945,039 includes a fuel cell, an electrolysis device and a hydrogen storage device; to couple the hydraulic motor of U.S. Patent No. 6,945,039 between the first and second volumes of the cylinder; and to have a step of producing hydraulic power of U.S. Patent No. 6,945,039, by retracting a plunger in the cylinder, as taught by Japan 2002-195,218, as a matter of engineering expediency.

Official notice is taken that a hydraulic cylinder can be coupled to an implement of a work machine, which includes a work body. It would have been obvious at the time the invention was made to one having ordinary skill in the art to couple the hydraulic cylinder of U.S. Patent No. 6,945,039 to an implement of a work machine, which includes a work body, as a matter of engineering expediency.

Claim Rejections - 35 USC § 103

Claims 1-17 are rejected under 35 U.S.C. § 103 as being unpatentable over Japan 2002-195,218 in view of Lisniansky. Japan 2002-195,218 discloses a power system and method of using the power system, which has a regeneration system, for a work machine comprising a hydraulic cylinder (2) fluidly connected to a hydraulic pump (3), driven by an electric motor (e.g. 42), wherein the cylinder has a movable plunger (7) defining first and second volumes (6, 5, respectively), and with a hydraulic motor (49) being fluidly connected between the first fluid volume and the second fluid volumes, in series with a throttle valve (e.g. 30) and connected to a reservoir (14, via 26); wherein the hydraulic motor powers a generator coupled to the electric motor by a power storage system; wherein the power storage system includes a fuel cell (46), an electrolysis device (4) and a hydrogen storage device (45); but does not disclose that the hydraulic motor is a variable displacement hydraulic motor.

Lisniansky teaches, for a power system and method of using the power system, which has a regeneration system, for a work machine comprising a hydraulic cylinder (1) fluidly connected to a hydraulic pump (58), wherein the cylinder has a movable plunger (21) defining first and second volumes (10, 11), and with a hydraulic motor (65) being fluidly connected to the first and second fluid volumes (by valve 2) , in series with a throttle valve (as part of valve 2), and a reservoir (62); wherein the hydraulic motor powers a a power storage system (e.g. flywheel 94); that the hydraulic motor is a variable displacement hydraulic motor, for the purpose of compensating for variations in pressure across the throttle valve (e.g. column 1 line 35-42, column 3 line 12-15 and column 3 line 64-column 2 line 2).

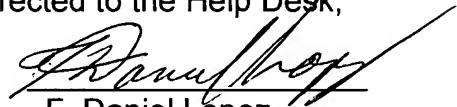
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Since Japan 2002-195,218 and Lisniansky are both from the same field of endeavor (regenerative fluid flow), the purpose disclosed by Lisniansky would have been recognized in the pertinent art of Japan 2002-195,218. It would have been obvious at the time the invention was made to one having ordinary skill in the art to replace the constant displacement motor of Japan 2002-195,218 with a variable displacement motor, as taught by Lisniansky, for the purpose of compensating for variations in pressure across the throttle valve.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Lopez whose telephone number is 571- 272-4821. The examiner can normally be reached on Monday-Thursday from 6:15 AM -3:45 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Look, can be reached on 571-272-4820. The fax number for this group is 571-273-8300. Any inquiry of a general nature should be directed to the Help Desk, whose telephone number is 1-800-PTO-9199.



F. Daniel Lopez
Primary Examiner
Art Unit 3745
March 03, 2006